

Missouri;

Past, Present, and Future:

Human-Environmental Interaction in the Cultural Landscape of Missouri

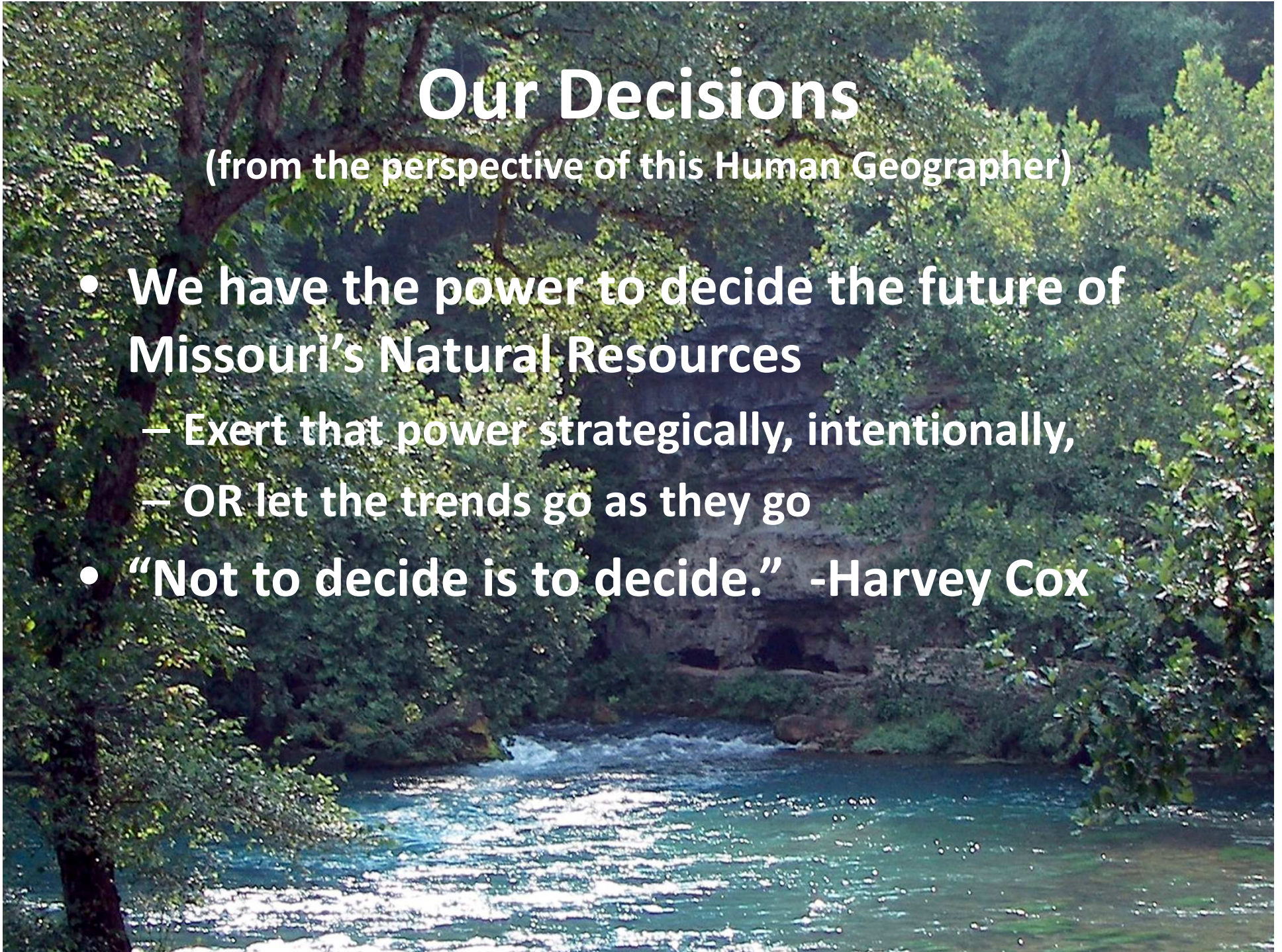


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Our Decisions

(from the perspective of this Human Geographer)

- We have the power to decide the future of Missouri's Natural Resources
 - Exert that power strategically, intentionally,
 - OR let the trends go as they go
- “Not to decide is to decide.” -Harvey Cox



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The Situation

Our contemporary Human Condition

Population

Increase

Urban

Coastal

Economic Disparities

Global differences

Widening gap between wealthy and poor

Costs of living/health rising



Impacts:

- Water Systems
 - Quantity/Quality; life. . .
- The Land
 - Forest to Forage; human settlement; agricultural systems (GMO or organic?). . .
- Biomes
 - Species at risk; plastic. . .
- The Atmosphere
 - Energy use (fossil fuels? carbon?); climate change. . .

Three Assumptions I make, as a Geographer:

1. Humans modify the physical landscape
2. Human culture determines what is a natural resource
3. There are many possible variations for natural resources



1. Modifying the Physical Landscape



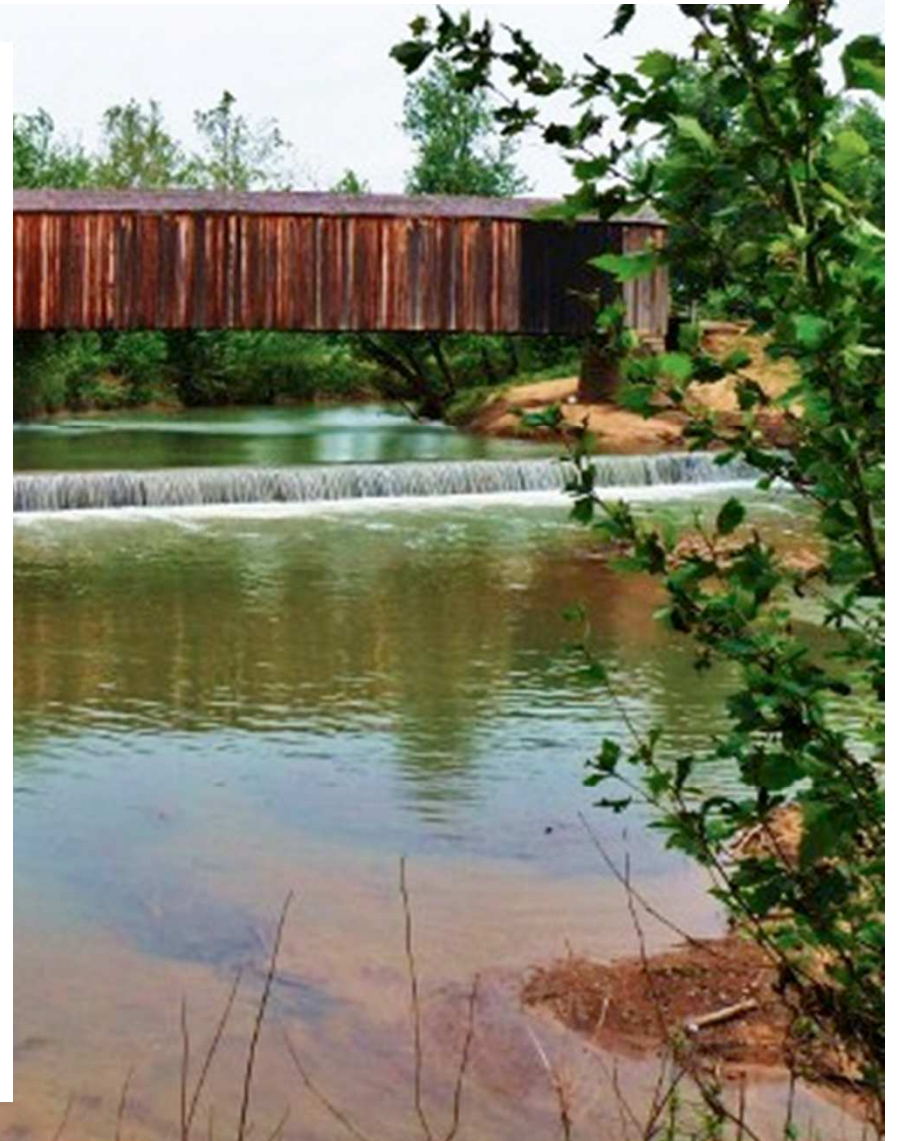
- The ecological systems we now have are products of thousands of years of
**Human-
Environmental
Interaction**

- Humans modify the “natural”
 - No idyllic past
 - Societies modified their landscapes
 - Degrees of modification
 - All places are modified by human culture
 - Cultural Landscape
- Which creates
 - SENSE OF PLACE
 - and momentum



2. Culture Determines Resources

- Specific, particular societies choose what is a resource, subject to changes in:
 - Perceptions
 - Values
 - Needs
 - Availabilities
 - Technology
 - Etc.

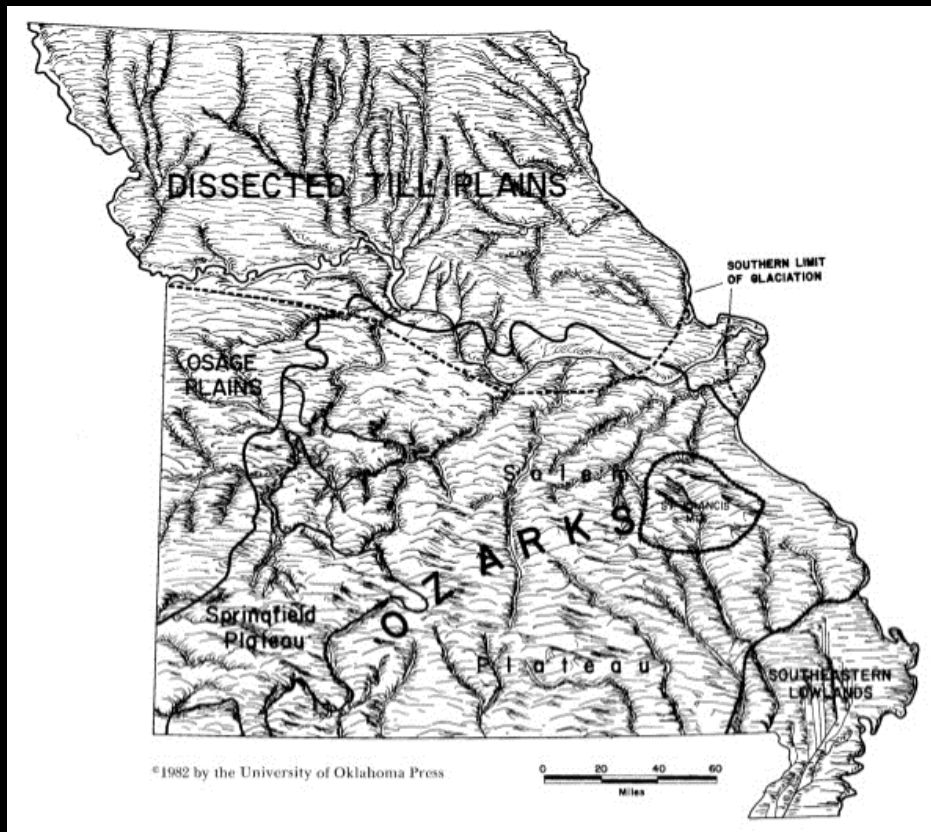


3. Many Variations in Resources

- Some resources are:
 - Finite
 - Renewable
 - but can be depleted
 - Or less at risk of depletion
 - Keystone - significantly effect whole system
 - Yet to be “discovered”
 - Forgotten, neglected, deemed not worthy



We “Follow” the Resource



- Resources defined for food, shelter, and tools
 - Water, Soil
 - Plants and Animals
 - Metals and Minerals
- Location
 - Site (physical attributes)
 - Situation (access and mobility)
- Subject to changes
 - Climate, Soil, Plants/Animals
 - Human Intervention



It's A Complex
World After All

Our Recent Missouri Sense of Place and Momentum - Choosing which Plants, Animals, Minerals. . .



Grains



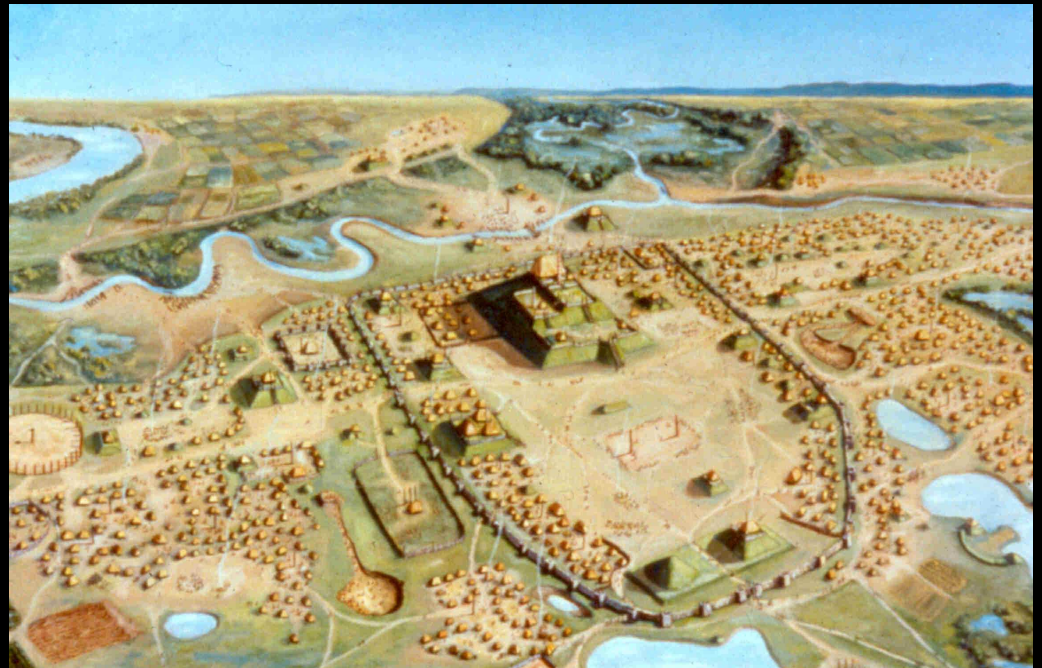
Livestock



Metals, Fossil Fuels, etc.

Native Americans, e.g.

- Propensity to populate and manipulate:
- Clovis species depletion
- Cahokia urban environment
- Semi-nomadic gathering and hunting; sedentary agriculture
- Relocation Diffusion



But early was mostly HARVESTING

Flora, Fauna, Minerals/Metals

- Gathering vegetation
- Hunting animals
- with limited Trade



Osage People

Then, Agriculture

- Selective Domestication
- Intensity of Production
- And the Arrival of Europeans



A New Age Began for Missouri (in scale, density, & distribution)



- Fur Trade
- Shifting balance of prairie and woodlands
- Cultivation
- Manipulation of water and soil
- Mining

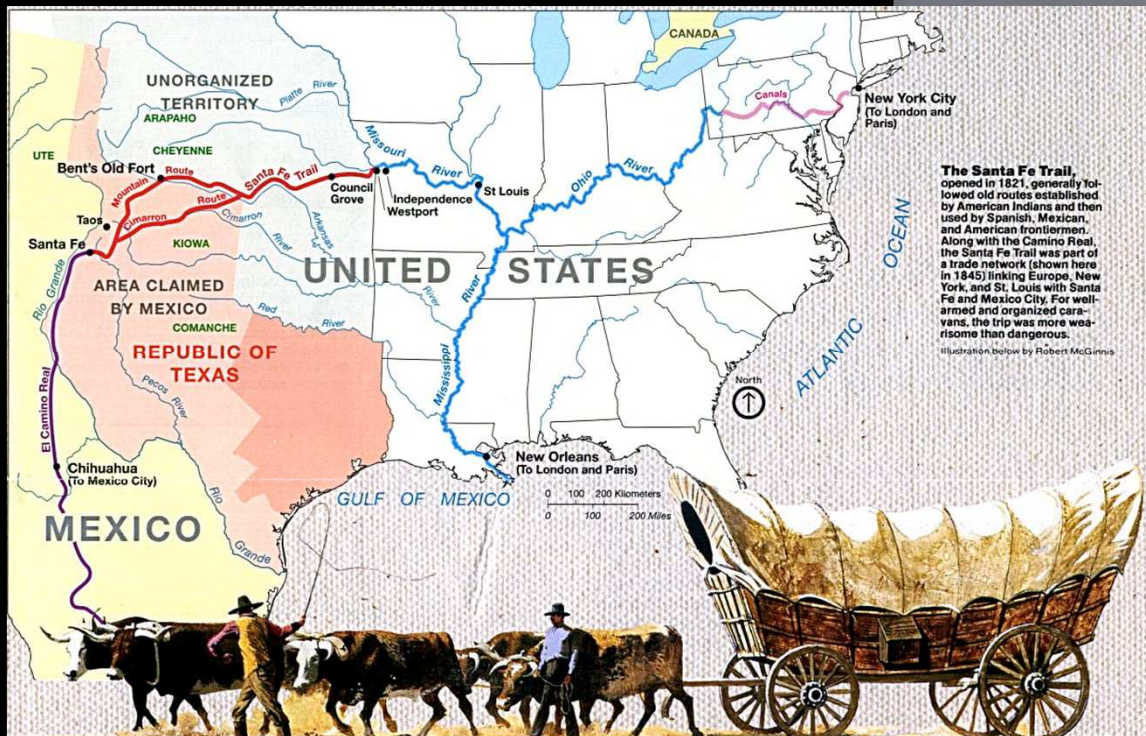
Europeans In Missouri

- Regional Variation
 - River Lowlands
 - Prairie Plains and Hills
 - Upland Woodlands
- Ethnic variation
 - French trap, trade, mine
 - Scots-Irish diversity in subsistence
 - Native removal
 - German agriculture and industry, urban and rural
 - African slavery
 - 20th Century diversity
- Interlocking themes of economics, politics, religion, etc. create sense of place and change the cultural landscape



History of Trade Networks

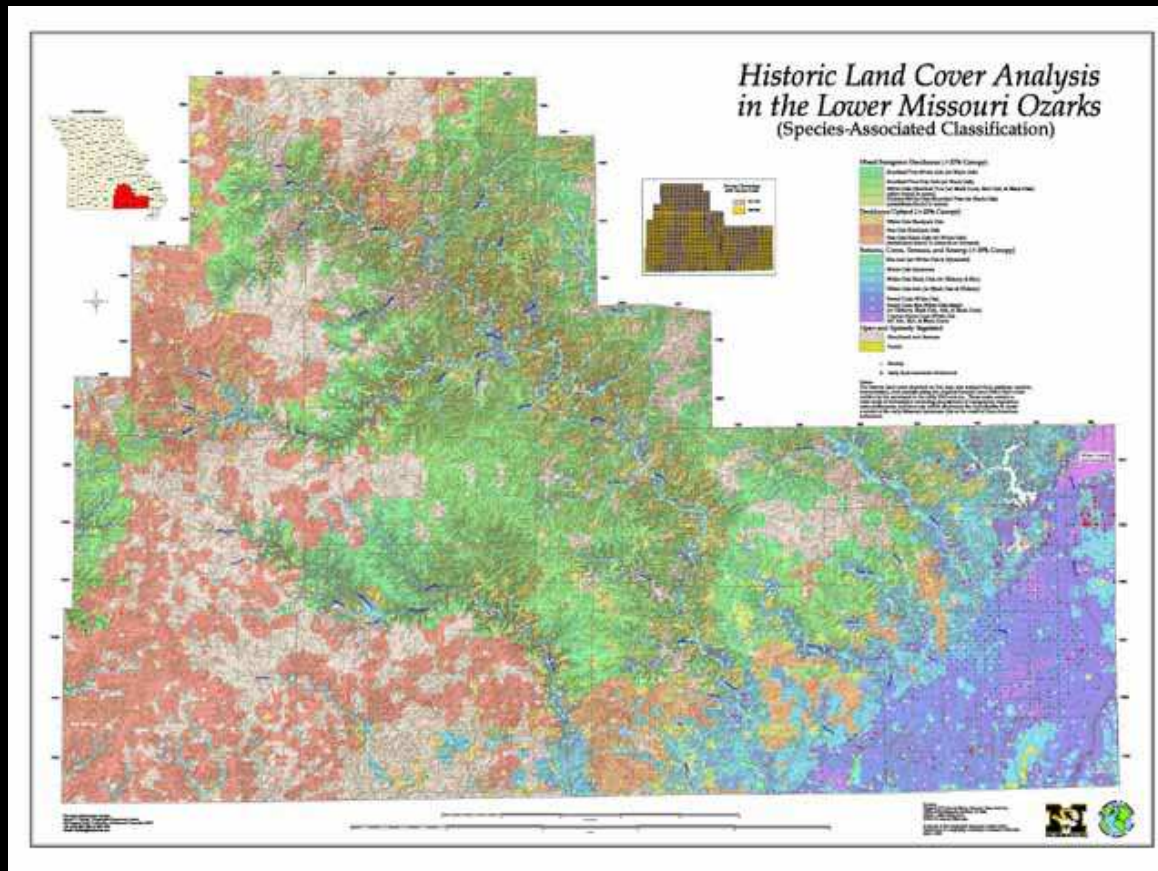
- Rivers and Trails



Mississippi and Missouri

Trails West and Southwest

MORE – the experience of Abundance



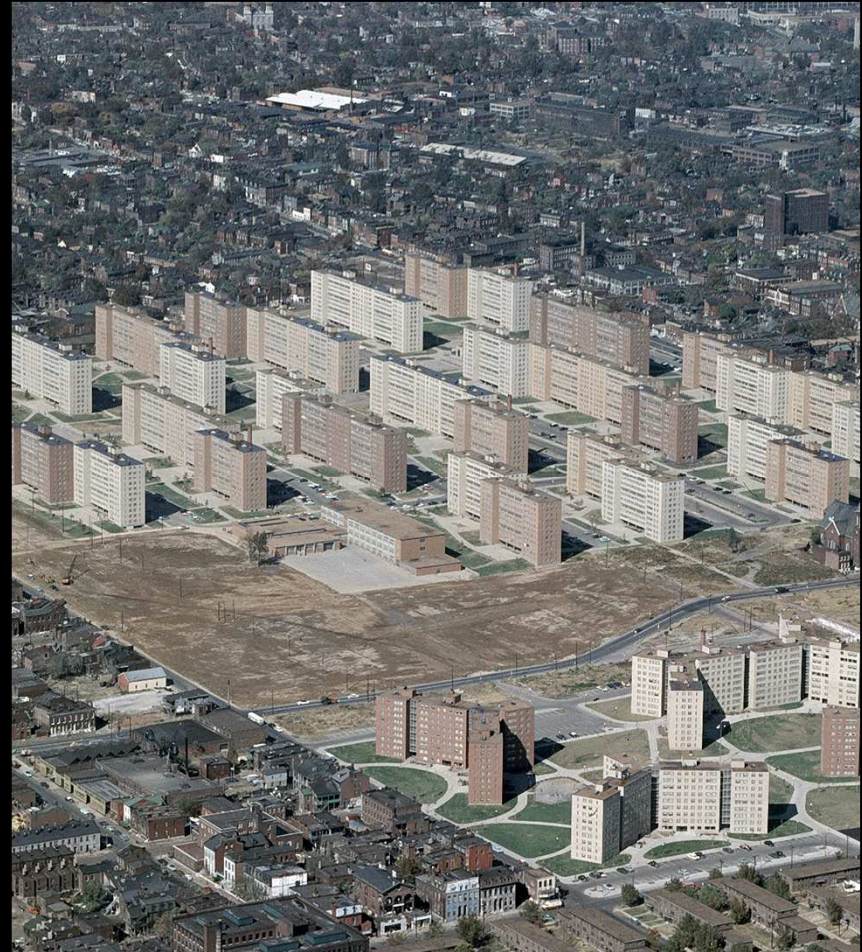
- Water
- Soil
- Temperate, Moist
- Vegetation and Wildlife
- Access and Mobility
- Dispersed Human Population

20th Century Diversity

- Primary Sector
 - Agriculture
 - Mining
- Secondary Sector
 - Processing
 - Manufacturing
- Tertiary, Quaternary, Quinary

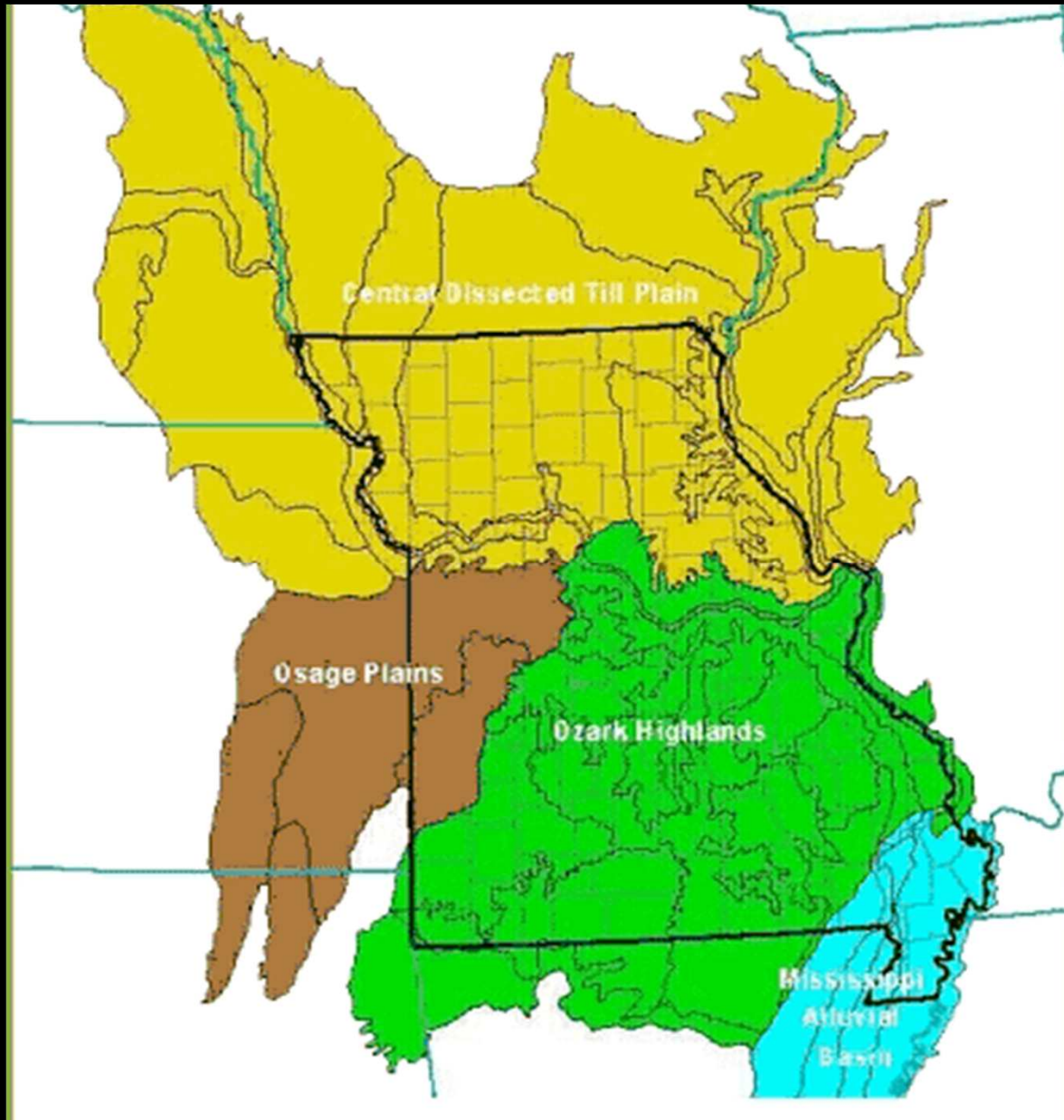
Resulting in Dramatic Reconstruction

- In only 300 years
- The Ecosystems modified:
 - Scale
 - Depletion
- Consumption
- Infrastructure
- Occupation/Settlement



Our Context: the strength of Missouri Diversity

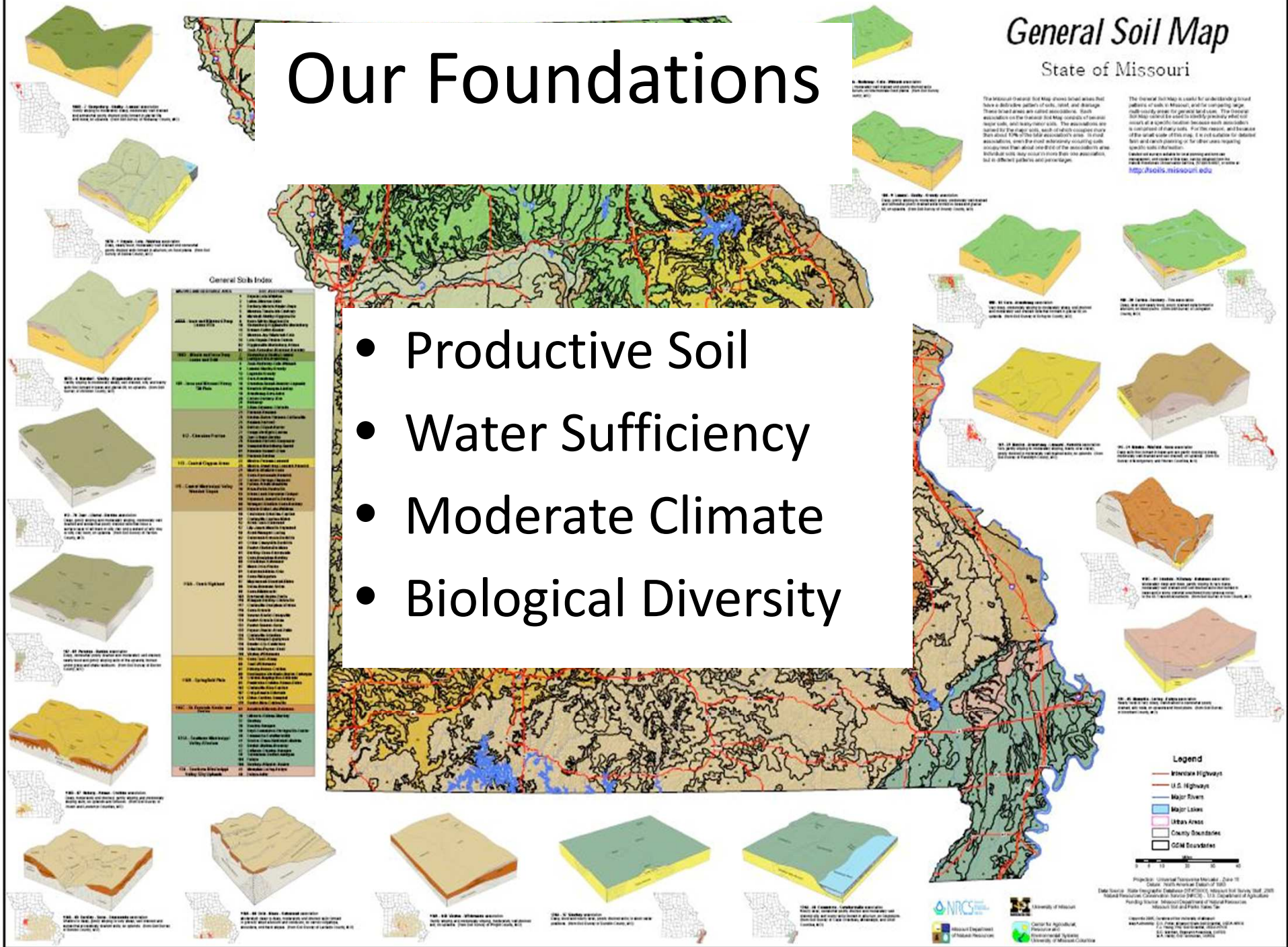
- In the Middle
 - East, West,
North, and South
- Exaggerated by
human migration
- Balance?
 - Resource
independence?
- Once was. . .
then became. . .



Our Foundations

- Productive Soil
- Water Sufficiency
- Moderate Climate
- Biological Diversity

General Soil Map State of Missouri



Had to Learn Conservation. . .



- Crisis and Necessity
 - Depletion
 - Flood
 - Erosion
 - Fire
- Ecosystems
 - Protection
 - Pro-action
 - Mixed Use

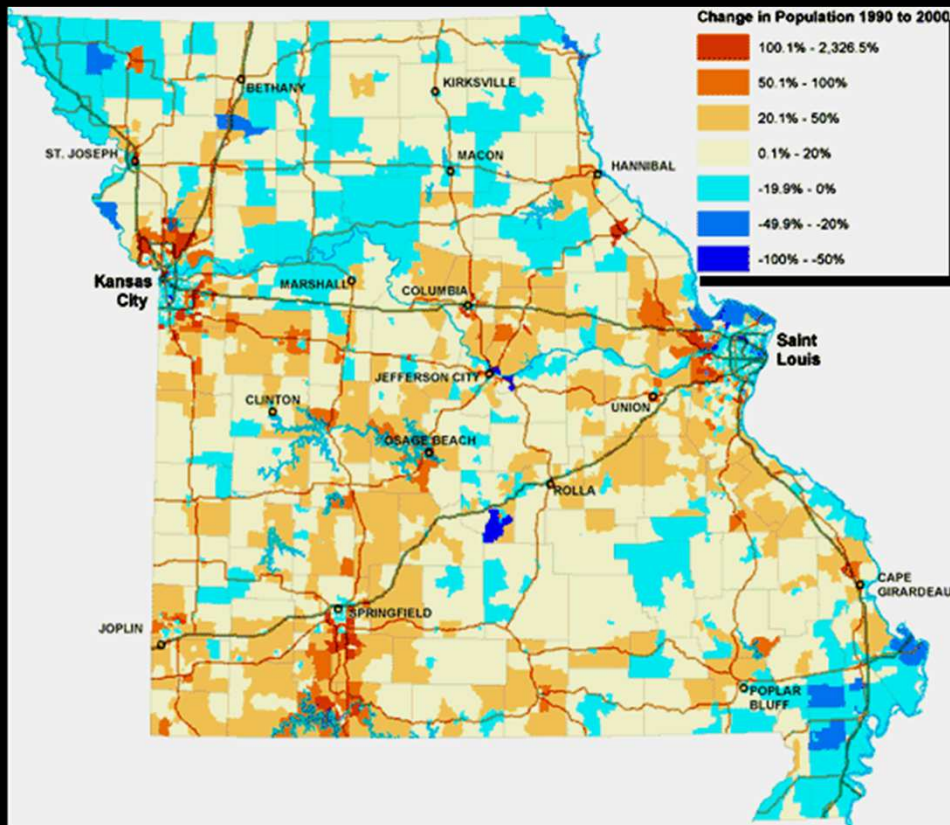
However, the historic Stresses:

- Human Migration and Population Growth
- Wars
- Economic Shifts
- Political Swings



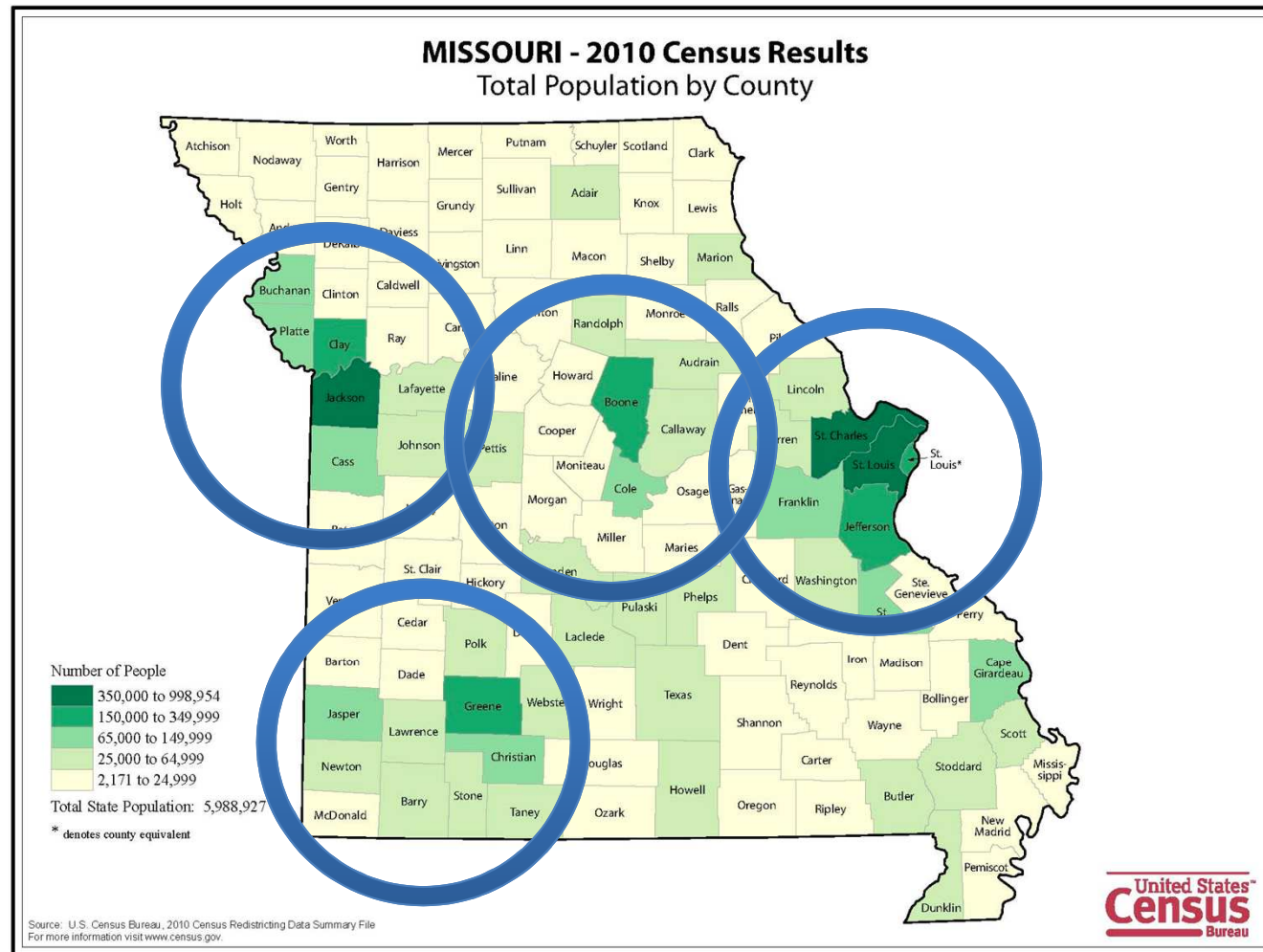
Death of Lyons at Wilson's Creek

Population change over 20th Century (3,106,665 to 5,595,211)



- Missouri percent of change lower than country
 - Low in depression years, high in peak baby boom years
- Lowest decade 1980s
- Decline in most northern agricultural areas
- Movement away from city centers to outlying areas
- Lake area growth

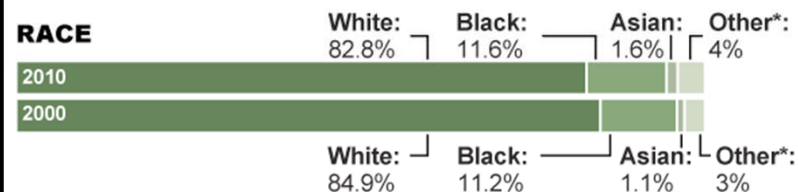
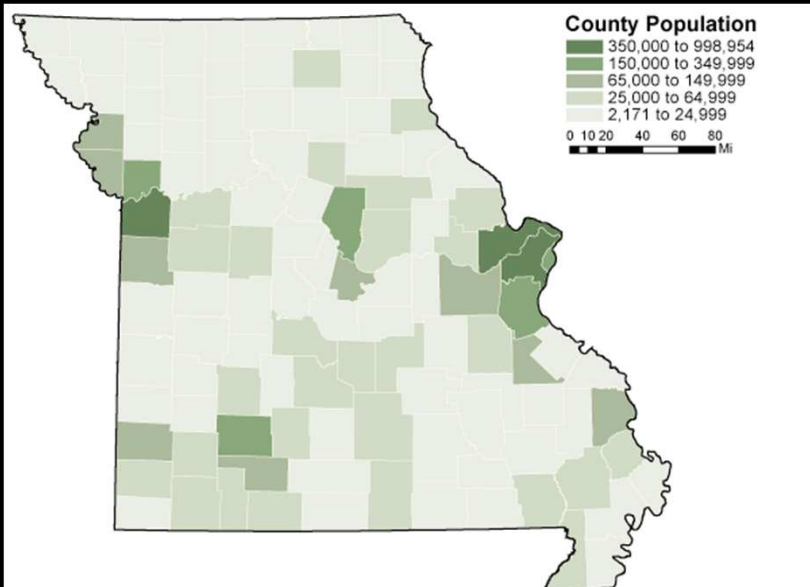
Consequent Population Density and Distribution



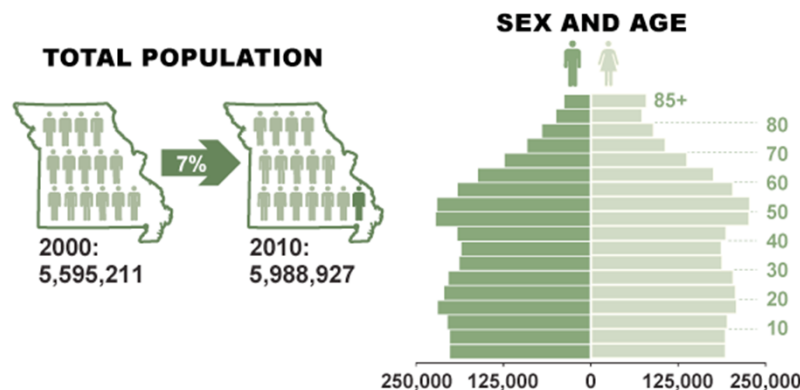
Percent Change in Population by County: 2000 to 2010



Source: U.S. Census Bureau, Census 2000 and 2010 Census Redistricting Data Summary File
For more information visit www.census.gov.

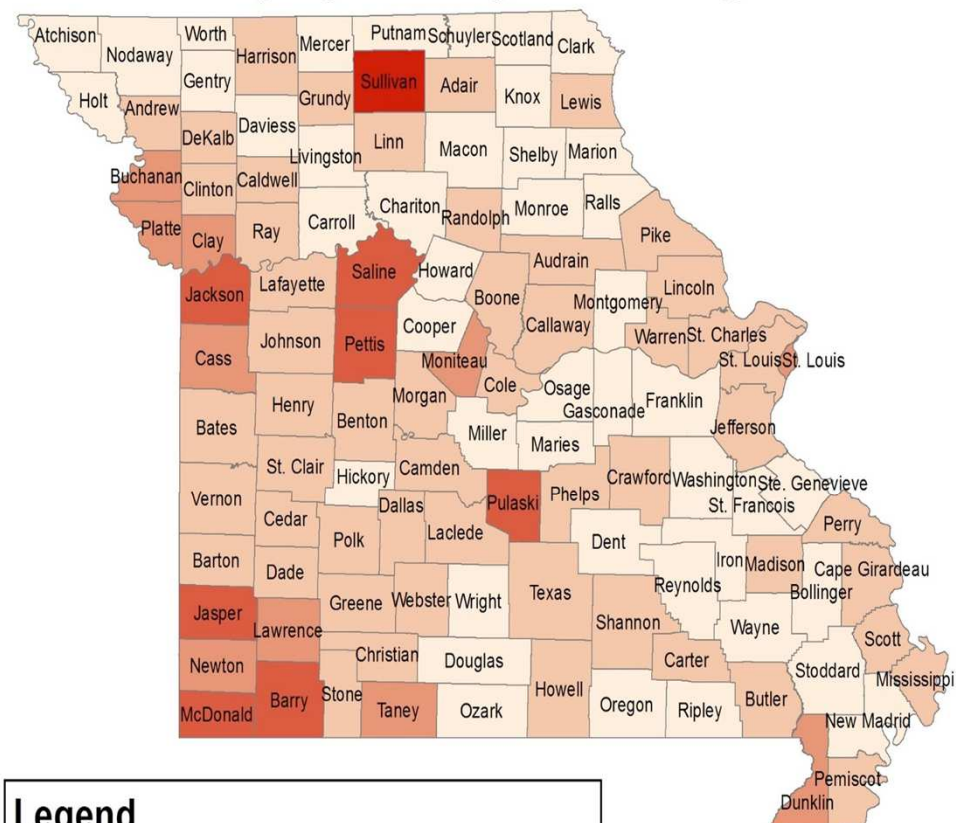


*Includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, some other race and two or more races
(Some totals may not equal 100 because of rounding.)



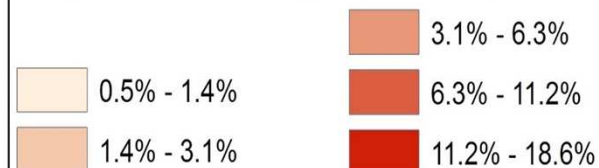
Source: 2010 CENSUS

Hispanic Population in Missouri County-by-County Percentage



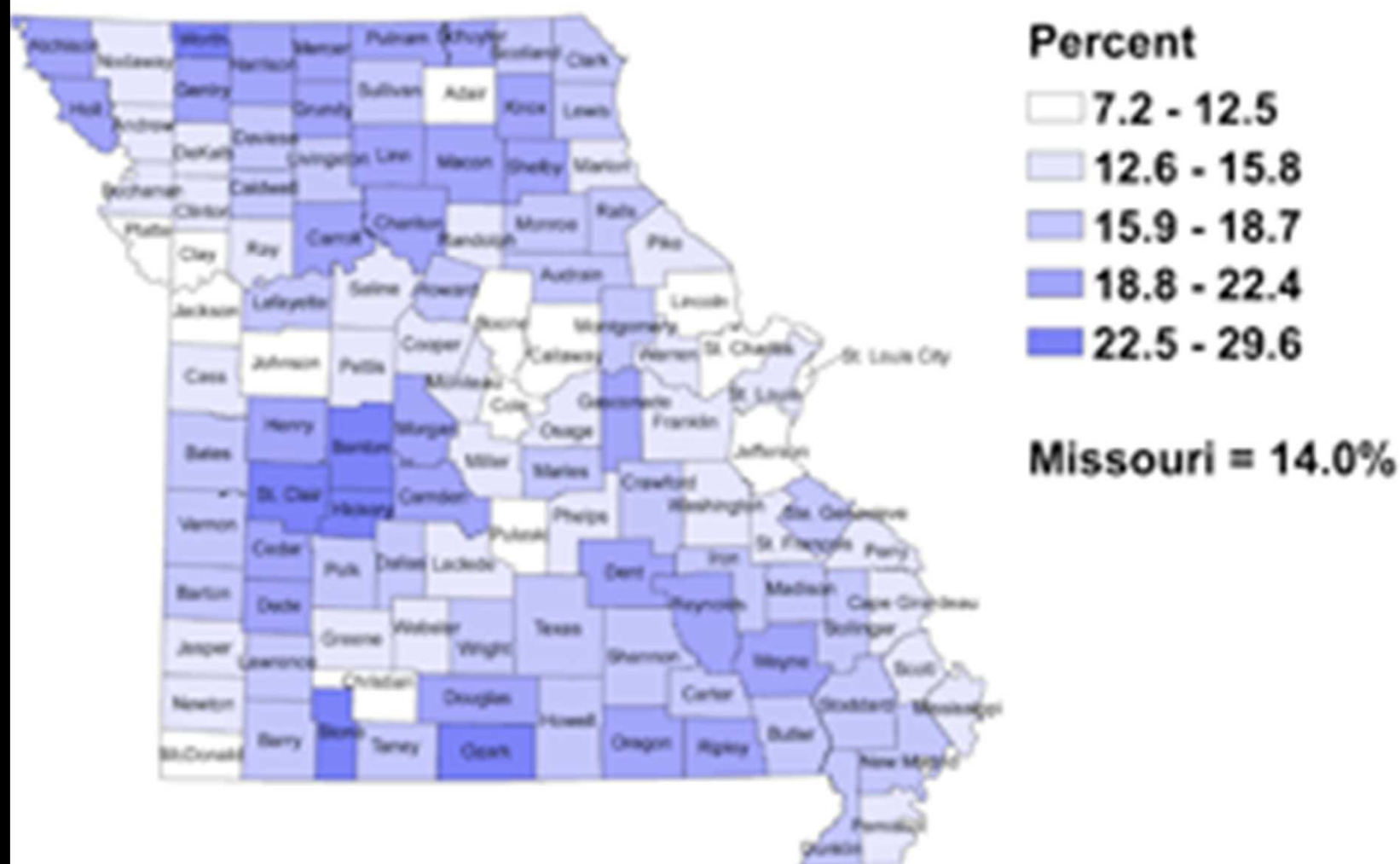
Legend

Hispanic Percentage by County



Source: 2010 U.S. Census Bureau
Author: Jacob McClelland

Percent of Population Age 65 and Over by County, 2010



Data Source: U.S. Census Bureau, Decennial Census DP-1, 2010
 Map Prepared By: University of Missouri Extension, Office of Social and Economic Data Analysis (OSEDA)
 Map Generated On: 19 May 2011

General Population Trends:

- Slowing overall growth
- Moving south
- Moving to urbanized areas
 - Center cities decline, while surrounding counties increase
- Aging population in southerly retirement areas
- More ethnic diversity



e.g. Retirement Residency

- The population pyramid
 - Baby Boomers retiring
- Decline in agriculture; increase in 'burbs
- Migration
 - Lakes - 3 regions
 - Southern tier, central lakes, southeast
- Outdoors as Nostalgia



Urban or Rural or Exurban?

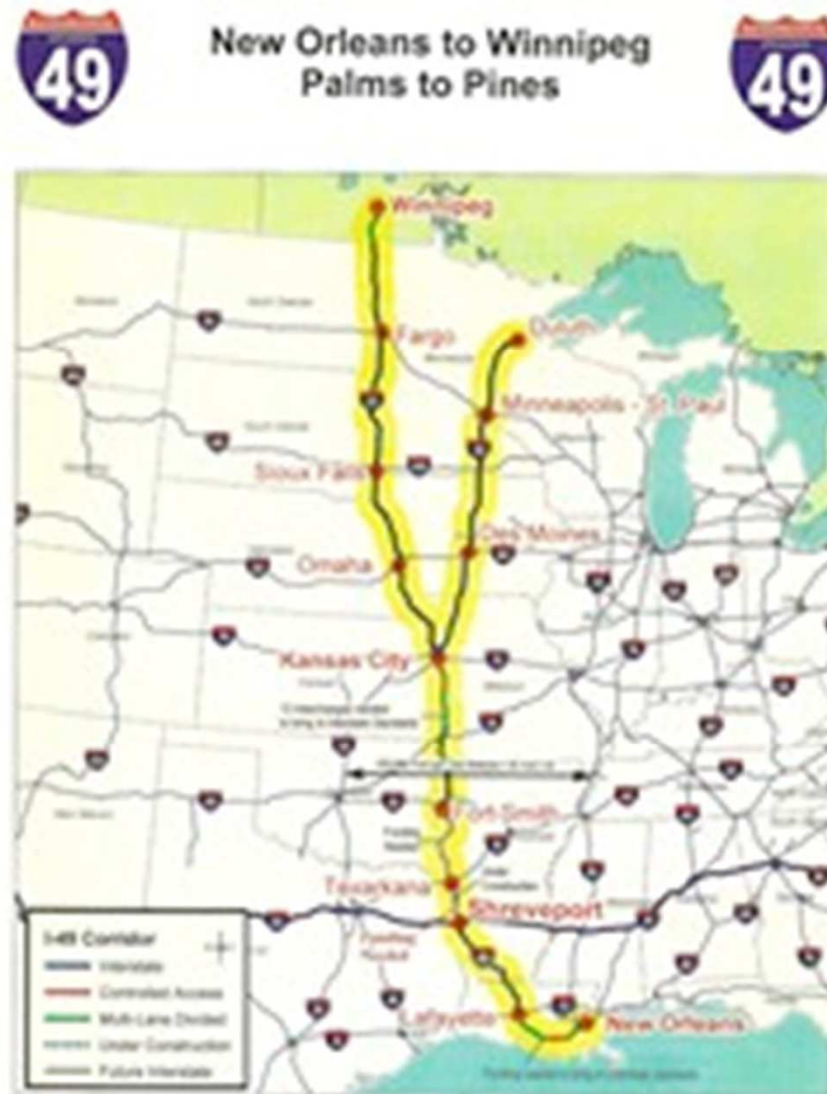
- Values and Attitudes
- Relationships
- Sustainability and Linkages
- Fear the Outdoors = “safe” outdoors?
- Appreciate the Outdoors = islands?



Transportation Corridors

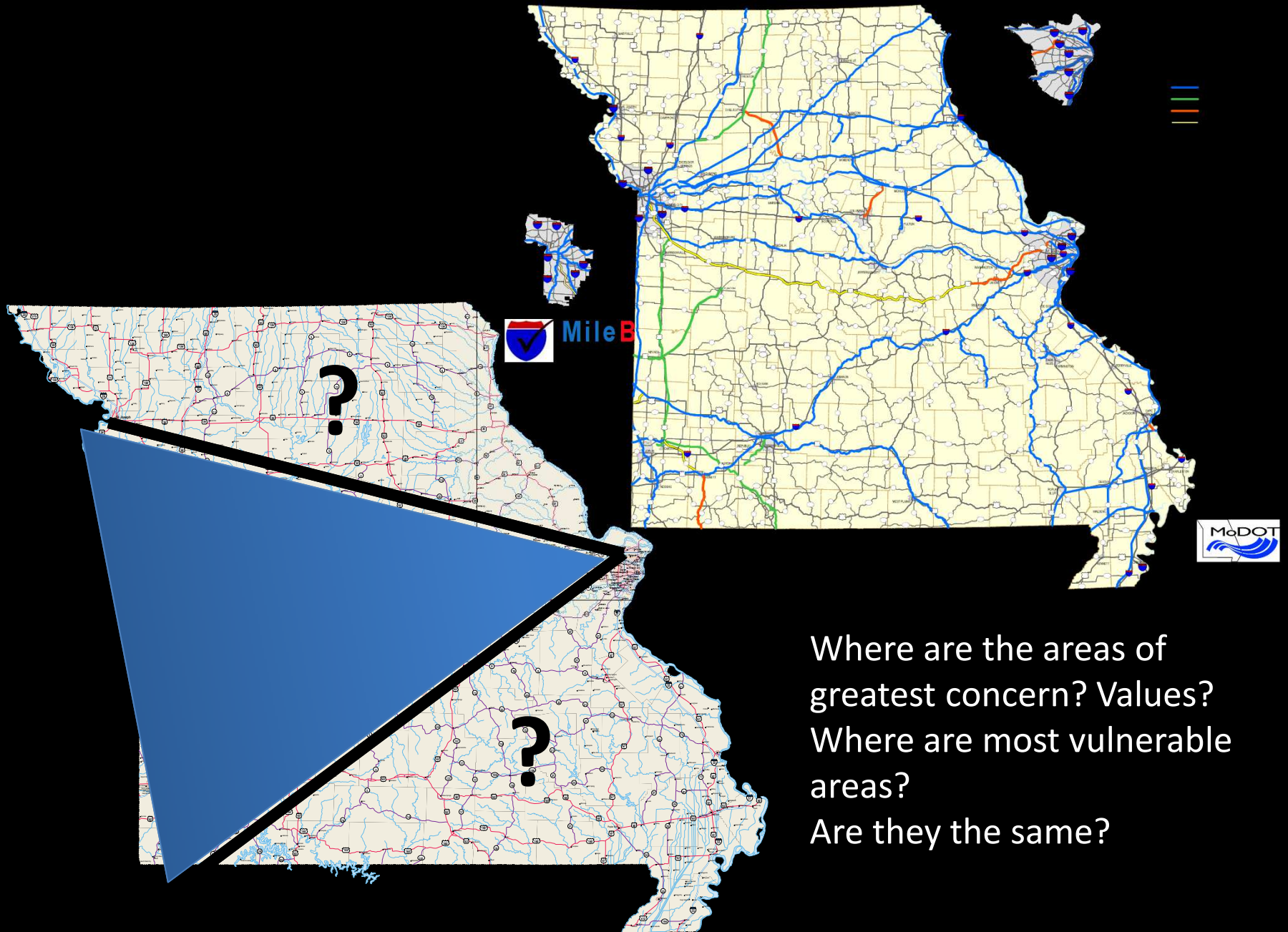


Natural Gas



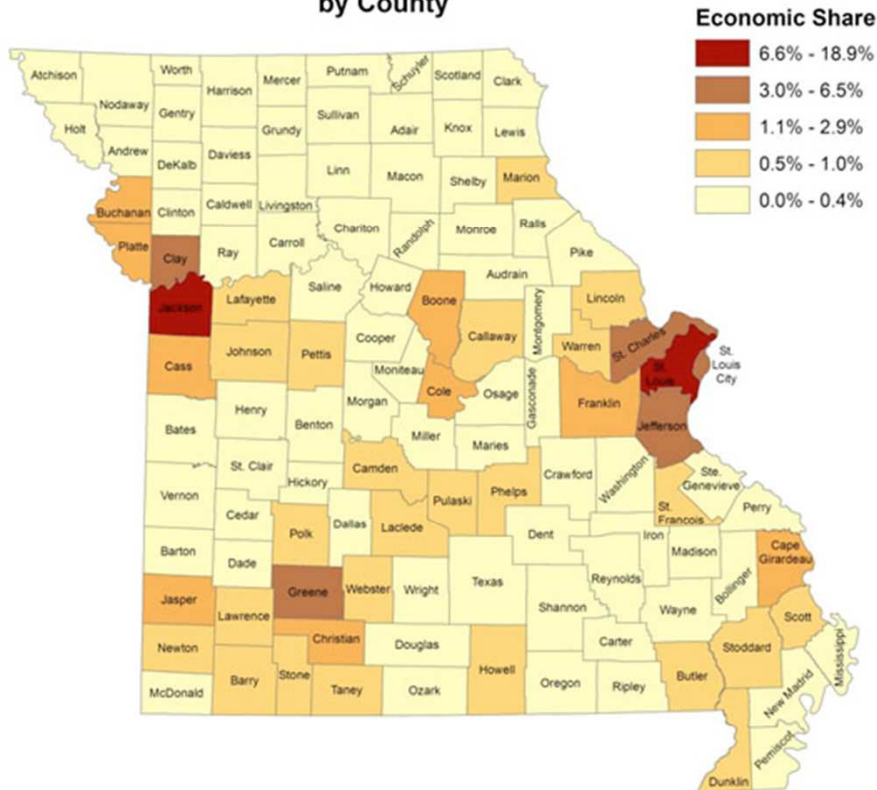
State Trail System



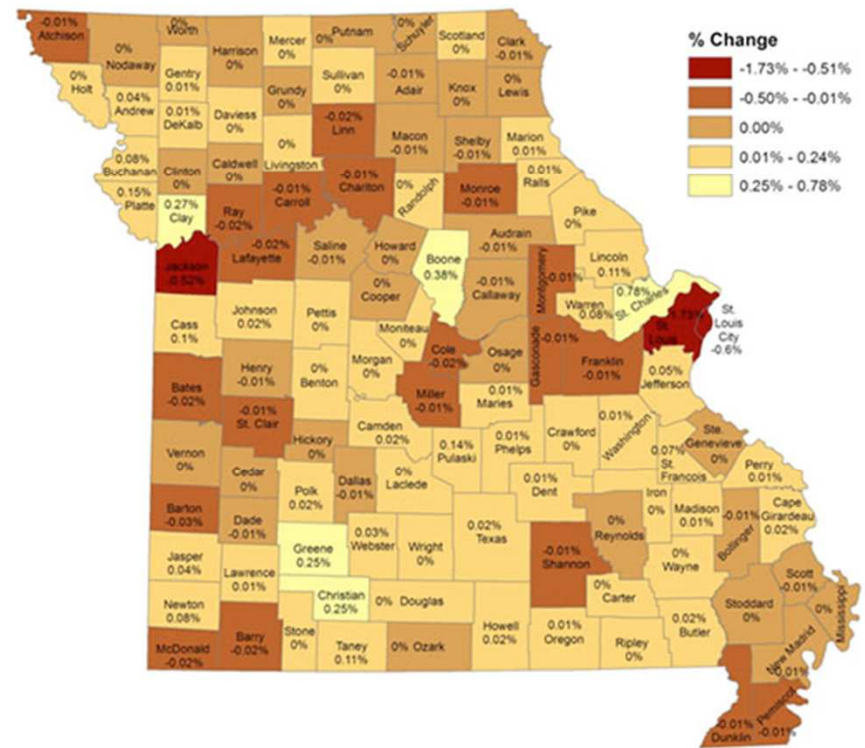


Where is the Economy?

**2013 Economic Share
by County**



**2003 to 2013 Economic Share
Percentage Point Change by County**



Short Term or Long Term Profits and Losses?

Will there need to be a Narrowing of Perspectives?

- Mobility
- Consumption
- Urban Advantages
- Networks
- Outdoor Recreation
- Healthy Natural Environment
- Open Space

At Odds?
Compromise?

The Emerging Systems

- Biological Diversity
 - Which do we end?
- Pollution
 - What health issues?
- Energy
 - At what environmental cost?
- Water
 - Quality and Quantity?
- Urban Systems
 - New ecologies?

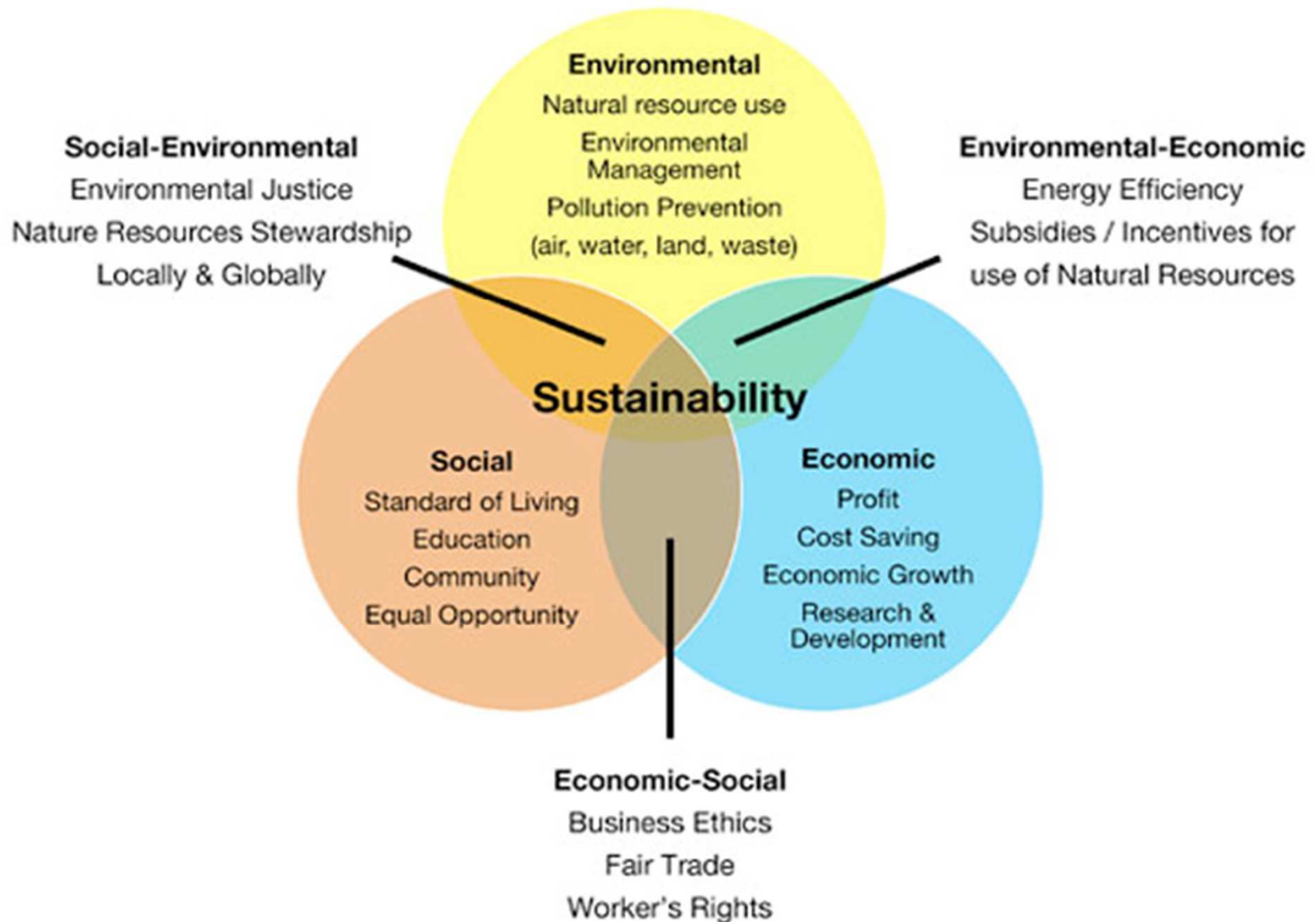


The Decisions: What do we do **Where**?



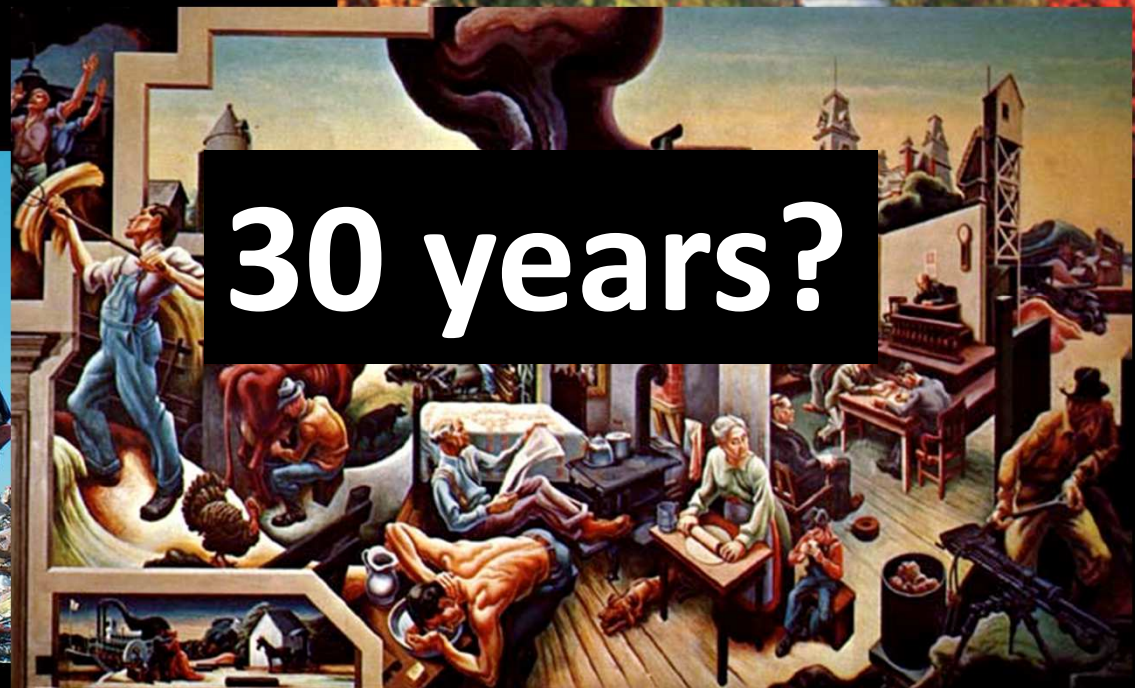
- Energy Consumption
 - Appropriate Sources
 - Transportation
- Ecological Zones
 - Preservation or Adaptation
 - Regional Integrity
- Urban Growth
 - Up and/or Out
- Type of Agriculture
 - Food, Fuel, Fiber, Feed
- **Sustainability**
 - **interconnections**

No one arena can dominate the others, and have sustainability.



What Kind of Culture?

- Consumption?
- Regional Integrity?
- Fairness?
- What Time Left?



Today we decide what kind of
Missouri we want!

